

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 to 81 (Cancelled).

82 (Currently Amended). A leak detector for a sterile contiguous fluid line for infusing a patient, the fluid line including a draw line connectable to at least one patient access and a return line directly connected to said at least one patient access, said detector comprising:

a portion of the fluid line adapted to be interoperable with a pump actuator such that fluid may be conveyed therethrough;

a filter, or filter connectors to permit connection to a filter, to complete a closed fluid circuit joining said draw and return lines;

said pump actuator having a first configuration in which a positive pressure is generated in said return line and a second configuration in which a negative pressure in said return line, whereby a flow through said return line and said at least one patient access may be reversed when the pump actuator switches from the first configuration to the second configuration, and

a blood leak sensor coupled to said fluid line,

wherein the return line directly connected to said at least one patient access forms a continuous fluid passage substantially free of gases.

83 (Previously Presented). A detector line as in claim 82, wherein said pump actuator in the second configuration is further configured to reverse a flow in both said return line and said draw line.

84 (Currently Amended) A blood flow direction control device for a sterile contiguous fluid line for infusing a patient, the fluid line including a draw line connectable to at least one patient access and a return line directly connected to said at least one patient access, said device comprising:

a portion of the fluid line adapted to be interoperable with a pump actuator such that fluid may be conveyed therethrough;

a filter, or filter connectors to permit connection to a filter, to complete a closed fluid circuit joining said draw and return lines;

at least a wetted portion of the portion of the fluid line and the pump actuator having a reverse flow operational mode in which the actuator generates a negative pressure in said fluid line, and a flow through said return line and said at least one patient access is reversed, and

wherein the return line directly connected to said at least one patient access forms a continuous fluid passage substantially free of gases.

85(Previously Presented). A blood flow direction device as in claim 84, wherein reverse a flow is achieved in both said return line and said draw line during the reverse flow operational mode.